

l64\_fomodel2  
(TMRh3gtdHbAVoYfF55ua23Bj6vnDjH4gyD2)

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Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v11\_fomodel1 : \iota \Rightarrow o$  be given. Let  $l1\_fomodel1 : \iota \Rightarrow o$  be given. Let  $v4\_fomodel2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k15\_fomodel1 : \iota \Rightarrow \iota$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v15\_fomodel1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k32\_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v3\_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_xreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ & X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k6\_subset\_1 X0 X1 = k4\_xboole\_0 X0 X1 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v6\_struct\_0 X0) \wedge ((v11\_fomodel1 X0) \wedge (l1\_fomodel1 \\ & X0))) \Rightarrow (\neg v1\_xboole\_0 (k4\_xboole\_0 (k3\_finseq\_2 (k15\_fomodel1 \\ & X0)) (k1\_tarski k1\_xboole\_0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. m1\_subset\_1 (k6\_subset\_1 X0 X1) (k1\_zfmisc\_1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v6\_struct\_0 X0) \wedge ((v11\_fomodel1 X0) \wedge \\ & (l1\_fomodel1 X0))) \wedge ((v4\_fomodel2 X1 X0) \wedge (m1\_subset\_1 X1 (k6\_subset\_1 \\ & (k3\_finseq\_2 (k15\_fomodel1 X0)) (k1\_tarski k1\_xboole\_0)))))) \Rightarrow \\ & (v7\_ordinal1 (k32\_fomodel2 X0 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v6\_struct\_0 X0) \wedge ((v11\_fomodel1 X0) \wedge (l1\_fomodel1 \\
& X0))) \Rightarrow (\forall X1.((v4\_fomodel2 X1 X0) \wedge (m2\_subset\_1 X1 (k3\_finseq\_2 \\
& (k15\_fomodel1 X0)) (k6\_subset\_1 (k3\_finseq\_2 (k15\_fomodel1 X0)) \\
& (k1\_tarski k1\_xboole\_0)))) \Rightarrow (\forall X2.(v7\_ordinal1 X2) \Rightarrow (( \\
& X2 = k32\_fomodel2 X0 X1) \Leftrightarrow ((v3\_fomodel2 X1 X0 X2) \wedge (\forall X3.(v7\_ordinal1 \\
& X3) \Rightarrow ((v3\_fomodel2 X1 X0 X3) \Rightarrow (r1\_xreal\_0 X2 X3))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v6\_struct\_0 X0) \wedge ((v11\_fomodel1 X0) \wedge (l1\_fomodel1 \\
& X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k6\_subset\_1 (k3\_finseq\_2 \\
& (k15\_fomodel1 X0)) (k1\_tarski k1\_xboole\_0))) \Rightarrow ((v3\_fomodel2 \\
& X1 X0 k6\_numbers) \Rightarrow (v15\_fomodel1 X1 X0)))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \tag{8}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v6\_struct\_0 X0) \wedge ((v11\_fomodel1 X0) \wedge (l1\_fomodel1 \\
& X0))) \Rightarrow (\forall X1.((v4\_fomodel2 X1 X0) \wedge (m2\_subset\_1 X1 (k3\_finseq\_2 \\
& (k15\_fomodel1 X0)) (k6\_subset\_1 (k3\_finseq\_2 (k15\_fomodel1 X0)) \\
& (k1\_tarski k1\_xboole\_0)))) \Rightarrow (\neg (\neg v15\_fomodel1 X1 X0) \wedge (k32\_fomodel2 \\
& X0 X1 = k6\_numbers)))
\end{aligned}$$